

REMARKS

The Office action of December 15, 2006, has been carefully considered.

Objection has been raised to the specification based on subject matter headings, and the specification has now been amended to add proper subject matter headings. In addition, a reference has been added to the prior filed PCT application, and the references to claims on pages 1 and 3 of the specification have been deleted.

Objection has been raised to the drawings on the basis that the rectangular boxes should be properly labeled, and replacement sheets have now been submitted for Figures 4 and 5 in which such boxes are labeled.

Objection has been raised to Claim 2 based on claim language, and Claims 11 through 13 have been rejected under 35 USC 112, second paragraph, as being apparatus claims which depend from method claims. Claims 1 through 13 have now been canceled and replaced by a new set of Claims 14 through 26 which have been written in proper form for U.S. practice. Withdrawal of the objection and the rejection under 35 USC 112 are requested.

Claims 1, 11 and 12 have been rejected under 35 USC 103(a) over Decca Ltd. In view of Pidwerbetsky et al. The Office alleges that it would have been obvious to one skilled in the art to modify Decca's transponder to generate different sideband frequencies to introduce an identity tag into the signal to be reflected to the interrogator, as taught by Pidwerbetsky et al. Moreover, the Office action alleges that Pidwerbetsky et al discloses that the interrogator is implemented with non-moving parts and Pidwerbetsky et al achieves directionality with non-moving parts by implementing multiple interrogators. "Therefore, it would have been obvious to one skilled in the art at the time of the invention

to modify Decca's interrogator to use non-moving parts, as taught by Pidwerbetsky."

Applicant does not agree with these allegations. The Pidwerbetsky et al patent discloses an RFID system which is a radio communication system for measuring the velocity and vibration of an RFID tag. It is not an attitude determining system which utilizes radar technology, and which measures range and bearing between an interrogator and a transponder. Indeed, Pidwerbetsky et al does not mention range or bearing measurement.

Thus, even if non-moving parts are used in the Decca system, one does not arrive at the claimed invention without a range and bearing measurement. Withdrawal of this rejection is accordingly requested.

Claims 2 through 6 and 10 have been rejected under 35 USC 103(a) over Decca in view of Pidwerbetsky et al and further in view of Baghdady '113.

In the paragraph bridging pages 7 and 8 of the Office action, it is alleged that Pidwerbetsky et al discloses "transponders signals received by a series of antenna elements on the interrogator(s), and combined signals used to determine angles to the transponders/angles of transponder motion in process that is functionally equivalent to the two-planes method...", referring to column 10, lines 25-58. However, what is disclosed by Pidwerbetsky et al is only the detection of angles in transponder motion (vibration), not detection of angles between an interrogator and transponders, and the method used for vibration detection has nothing in common with a method for bearing detection recited in the present claims.

The Decca reference discloses an attitude measuring system comprising a standard rotation radar with a fairly complex radar transceiver. It mentions the possibility of radiating a coded response, but is far from mentioning an ID

tag. Given the state of the art, it would not have been obvious for one skilled in the art to arrive at the presently claimed method.

While the Decca patent does disclose a system with a function similar to that of the claimed invention, the Decca system is more complex and requires moving parts that need extensive maintenance. Moreover, it does not disclose ID tags. Pidwerbetsky et al does disclose a single carrier tag method, and points out that this system has some advantages regarding clutter, but does not carry out a range and bearing measurement, and is not at all obvious that concise range and bearing measurements can be made with non-moving parts.

The Baghdady '113 reference does disclose the use of a directionally dependent Doppler shift in a radar directive antenna system which is different from that of the invention, and does not disclose or suggest measuring range and velocity.

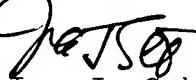
Withdrawal of this rejection is requested.

Claim 7 has been rejected under 35 USC 103(a) over Decca, Ltd. In view of Baghdady '113 and further in view of Baghdady '809. While Baghdady '809 discloses a tracking and positioning radar system it does not cure the defects of the other references as mentioned above, and withdrawal of this rejection is requested.

The allowability of Claims 8, 9 and 13 has been noted.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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